(i) the characteristic of said filter
means comprising a plurality of similar,
sequential, overlapping, peaking character-
istics, defining respective adjoining
frequency bins, [and]:

(E) means for producing from [target
signals output in adjacent frequency bins
in the vicinity of the estimated target
signal frequency a derived signal charac-
teristic having a peak at a predetermined
position in relation to said estimated
target signal frequency, means for correct-
ing the estimate of target signal frequency
and shifting said derived signal character-
istic accordingly, the target signal result-
ing from said derived signal characteristic
being employed in a said tracking loop.]
a first pair of adjoining frequency bins a
derived bin characteristic similar to said
peaking characteristics,

(ii) from a second pair of adjoining
frequency bins a further, similar derived
bin characteristic,

(iii) the two derived bin character-
istics lying symmetrically astride the es-
timated target signal frequency,

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(F)   means for controlling the position of said two derived bin characteristics continuously, and

(G)   means for determining the frequency error between the target signal frequency and the centers of said two derived bin characteristics and effectively sliding said two derived bin characteristics to re-center them on the newly determined position of the target signal.--

Cancel claims 2-4;

Claims 5, 6, 9 and 11, line 2, change "2" to --17--;

Claim 7, line 2, change "2" to --1--;

Claims 7, 9 and 11, line 1, cancel "missile-borne";

line 2, before the comma, insert --in a missile--;

Please add the following claim:

2--17. A radar tracking system according to claim 1, including a Doppler tracking loop having a speedgate filter in the I.F. signal path and comprising means responsive to the power outputs within said two derived bin characteristics and means for obtaining an algebraic difference of the power outputs to indicate the degree and direction of said frequency error, said frequency error being employed to control the I.F. target frequency to tend to maintain it at a predetermined frequency within the passband of said speedgate filter.--

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